Breast and Cervical Cancer Control Program
Clinical Update
December 1999

Colposcopy Without Biopsy

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The colposcopically directed biopsy, usually performed with an endocervical curratage, is the critical element used to evaluate patients with abnormal cervical cytology. Despite widely accepted subjective colposcopic grading systems, it is not possible to reproducibly predict histologic diagnoses based upon colposcopic appearance alone. Despite this limitation, there are some clinical situations when biopsy may not be needed.

The evaluation of abnormal cytology during pregnancy is one such situation. The indications for colposcopy during pregnancy are similar to those that are used with non-pregnant patients. Pregnant patients with any cytologic suggestion of high-grade dysplasia (HGSIL), or repeated episodes of minimal cytologic atypia (ASCUS or LGSIL) should be colposcoped. In evaluating these patients, the colposcopist must conclusively answer the simple question, "Does my patient have invasive carcinoma?" If the answer is "definitely, absolutely, no", the patient and her provider may choose to defer definitive diagnostic evaluation until two to three months after delivery. A patient with any degree of cervial intraepithelial neoplasia (CIN), but no invasive carcinoma, may be managed expectantly. An experienced colposcopist does not always need a biopsy to conclusively rule out invasive carcinoma. Although it is not possible to definitively differentiate grades of CIN without biopsy, it is possible to state that there is no cytologic or colposcopic suggestion of invasive cancer. If the answer to the "Does my patient have invasive carcinoma?" question is anything other than an absolute "No", then biopsy is needed for treatment planning. When the answer to this pivotal question is "I can't be sure," or "I can't tell," biopsy is indicated.

As a practical matter, one must err on the side of conservatism. If there is an extensive colposcopic lesion, biopsy is indicated. If the cytolgic abnormality suggests a significant lesion such as possible invasive or microinvasive carcinoma, even in the face of bland colposcopy, biopsy should be done. If the cytologic abnormality suggests glandular dysplasia, clinical impressions are often off base, and biopsy is indicated.

It is appropriate here to briefly consider cervical biopsy during pregnancy. Colposcopic biopsies are traditionally deferred until the second trimester. There is no question that biopsy site bleeding is more pronounced when biopsy is performed during pregnancy, but it almost always responds to prolonged direct pressure, without cautery. Simply holding a swab on the site for three to four minutes (which can seem like three to four years) is usually sufficient. Although most pregnant women with abnormal Paps can be managed without cervical biopsy, one should not let fear of bleeding dissuade one from performing an indicated biopsy.

A second scenario that uses colposcopy without cervical biopsy concerns patients with persistant refractory minimal cervical cytologic abnormalities. After an initial evaluation, which includes colposcopically directed biopsies, a patient with no suggestion of invasive cancer is offered a treatment menu from which she can choose a therapy based upon her individual needs. This treatment menu includes hysterectomy, conization, laser vaporization, cryocautery, and a final, probably underutilized, option- observation. The rate of progression of low-grade dysplasia to a more severe lesion has been estimated to be in the range of 15 to 45%. One can safely infer from these progression rates that spontaneous regression or persistent unchanged CIN occurs in from 55 to 85% of patients. Progression, when it does occur, evolves slowly over months to years, thus safely allowing a conservative approach.

An observation policy is usually restricted to patients with CIN1 or CIN2, but there may be selected pa-

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tients with CIN3 who choose this option. A patient choosing observation should have cytology and colposcopic screening at least every six months. The cervical cytology in a patient with CIN will usually remain abnormal, and serial Pap smears can show wide variation in varying degrees of cytologic abnormality. It has been observed that patients with low grade CIN may, under observation, have complete resolution of one focus of colposcopic abnormality associated with the near simultaneous appearance of a new colposcopic abnormality, often in a different quadrant of the cervix. If there is no cytologic suggestion of invasive carcinoma, and no colposcopic suggestion of a more severe dysplastic lesion, observation continues.

The open ended requirement for repeated cytologic screening and colposcopy is not seen as an attractive option for many patients with CIN. Patients often prefer the quicker ablative techniques for removing CIN. Those patients who elect observation may, after the initial complete evaluation shows no suggestion of invasive carcinoma, be followed by serial colposcopy without biopsy.

Regression Rates for LSIL

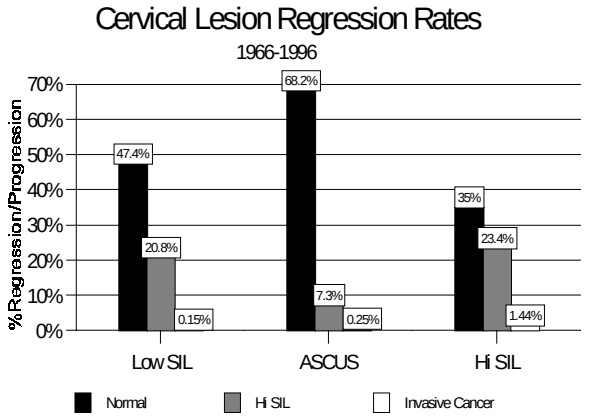
by Claudia Himes, R.N., Nurse Consultant

The Centers for Disease Control and Prevention (CDC) conducted a review of scientific literature to develop a policy on cervical cancer screening services and to ensure that the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) resources are used to reach priority populations. An external work group comprised of clinical experts, NBCCEDP program directors, researchers and directors of national organizations gave guidance to the development of the cervical health policy.

Approximately 2.5 million women in the United States are cytologically diagnosed each year with a low grade lesion. Literature citing data from screening programs in North America, British Columbia, and Canada, show that most cytology specimens with a diagnosis of low-grade squamous intraepithelial lesion (LSIL) will spontaneously revert to normal without therapy. Approximately 60 percent of these lesions regress spontaneously. Few women diagnosed with LSIL will have a lesion that will progress.

A meta-analysis of 15 eligible studies, representing 27,929 patients was conducted to estimate the rates of progression and regression without treatment of cervical squamous intraepithelial lesion (SIL). The studies consisted of women whose Pap tests showed squamous atypia or worse and who were identified by a search of MEDLINE from 1966 to 1996, Current Contents, the Federal Research in Progress database and references of review articles and identified studies, and by experts in the field. The following rates of regression to normal found that 68 percent of atypical squamous cells of undertermined significance (ASCUS); 47 percent of LSIL; and 35 percent of high grade squamous intraepithelial lesion (HSIL) regressed within 24 months to normal. Also, only .25 percent of ASCUS, .15 percent of LSIL, and 1.44 percent of HSIL progressed to invasive cervical cancer within 24 months (Melnikow, J., 1998). A sample of data from the Texas Department of Health, Breast and Cervical Cancer Control Program (BCCCP) on LSIL regression rates after four to six months found that 58.5 percent of LSIL regressed to normal within a four- to six-month period.

A new policy incorporating appropriate follow-up for abnormal Pap test results and reimbursement of diagnostic procedures for the BCCCP is being developed and distributed for comment in December.



The above chart illustrates the regression/progression of a cervical lesion result of a repeat Pap test after two years.

Results are taken from a meta analysis of 81 studies representing 27,929 patients.

Source: Obstet. Gynecol. 1998 Oct; 92(4 Pt 2): 727-35

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